

## **Historic, archived document**

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Reserve  
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**HOW**

**TO**

**PREPARE**

**GULFCOAST**

**SANDHILLS**

**FOR**

**PLANTING**

**PINES**

Frank W. Woods  
John T. Cassady  
Harry Rossoll

**Put idle  
acres to  
work!**

**First  
prepare  
your land,  
then--**

**Profit by  
planting  
pines!**



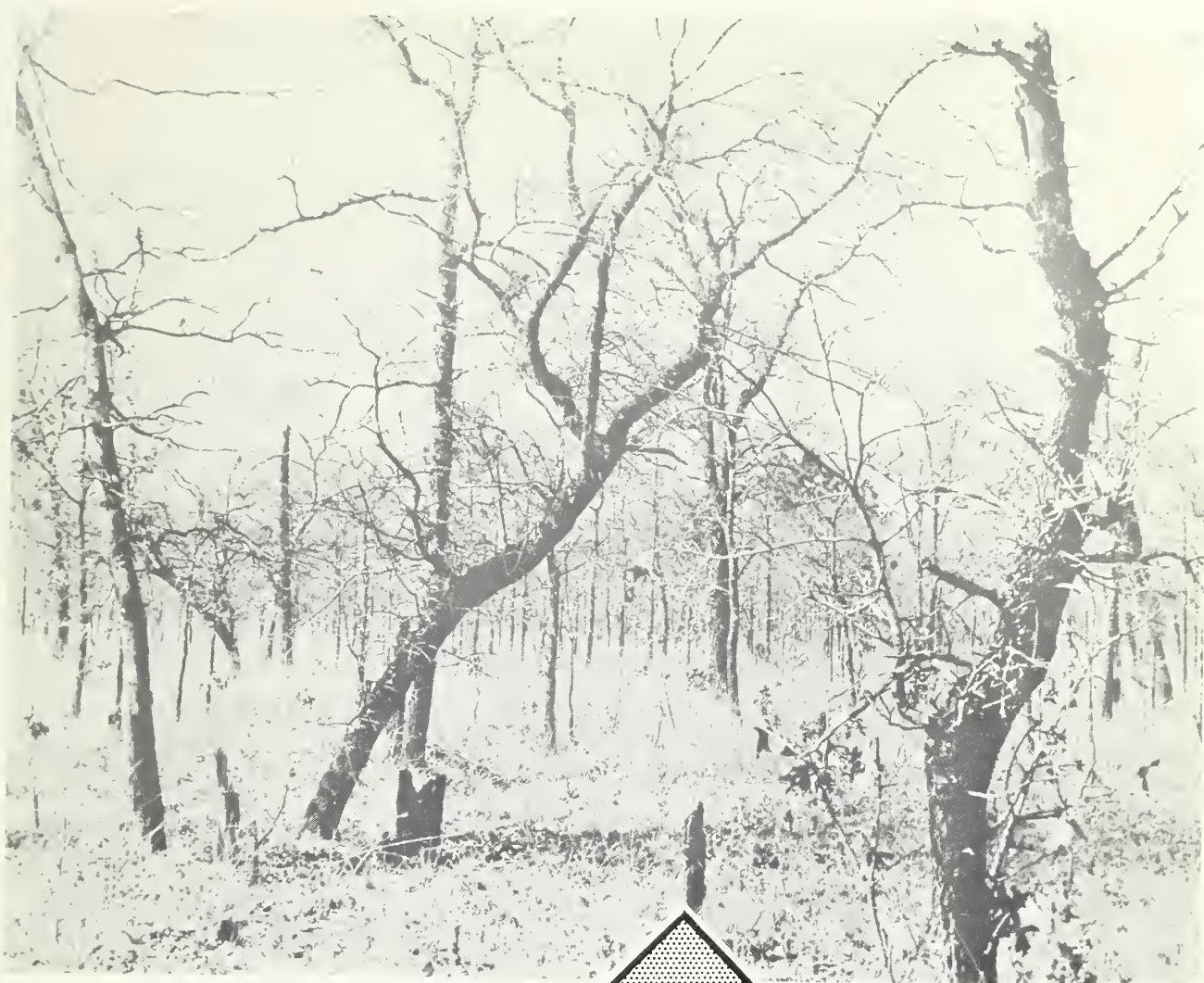




Tree growing capacity is wasted on







scrub oaks and wire grass

Of course, you will wish to preserve some scrub-oak patches to provide a variety of cover and food for game. Elsewhere, it will pay to...

**SWAP YOUR SCRUB OAKS FOR  
MERCHANTABLE PINE TIMBER !**



# SITE PREPARATION IS NECESSARY



Experiments have shown that scrub oaks and wiregrass must be eliminated before pine can be grown.

The sandhills get enough rain but the soils don't hold moisture.

The water table is so deep that roots can't penetrate to it.

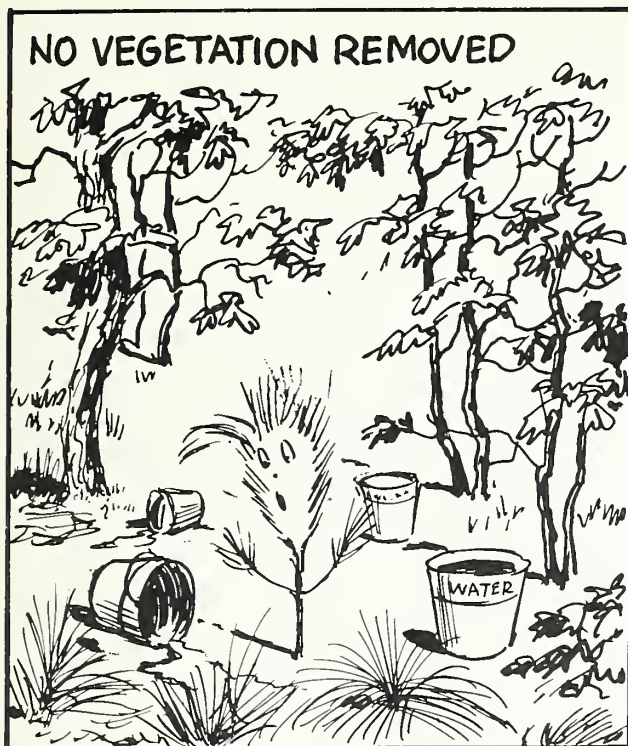
OAK AND WIREGRASS ROOTS ARE CONCENTRATED IN THE UPPER 12" OF SOIL

After summer showers this mat of roots quickly takes up moisture that pine seedlings need.





RESEARCH WORKERS OF THE U.S. FOREST SERVICE'S CHIPOLA EXPERIMENTAL FOREST HAVE FOUND THAT REMOVING THE OAKS AND GRASS CONSERVES SOIL MOISTURE AT CRITICAL TIMES.



In planting experiments, pines survived best where soil moisture was most abundant.



# METHODS OF CLEARING LAND

EARLY TESTS SHOWED THAT NEITHER FIRE NOR CHEMICALS DO A GOOD JOB OF CLEARING SANDHILLS. HEAVY MACHINERY IS NEEDED. PINES GROW BEST ON SITES PREPARED WITH A TANDEM CHOPPER.

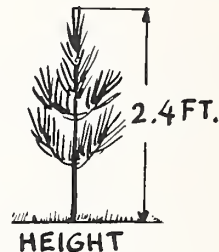
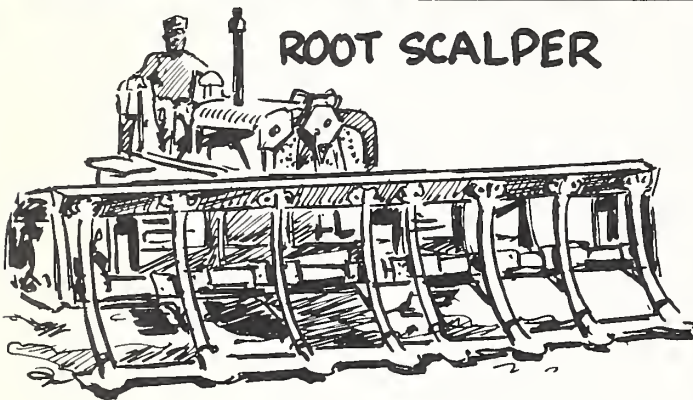
## EQUIPMENT

### TANDEM CHOPPER



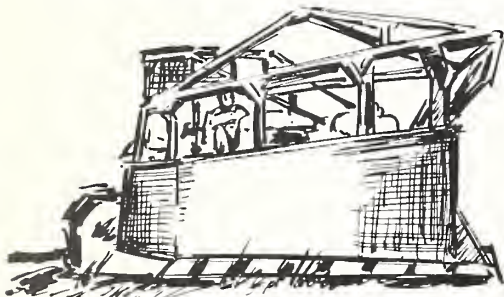
**83%**  
SURVIVAL

### ROOT SCALPER



**83%**  
SURVIVAL

### BSW BRUSH REMOVER



**86%**  
SURVIVAL

### NO TREATMENT



**58%**  
SURVIVAL



**THIS 22,000-POUND TANDEM CHOPPER PROVED BEST**



**RECOMMENDED  
TREATMENT**

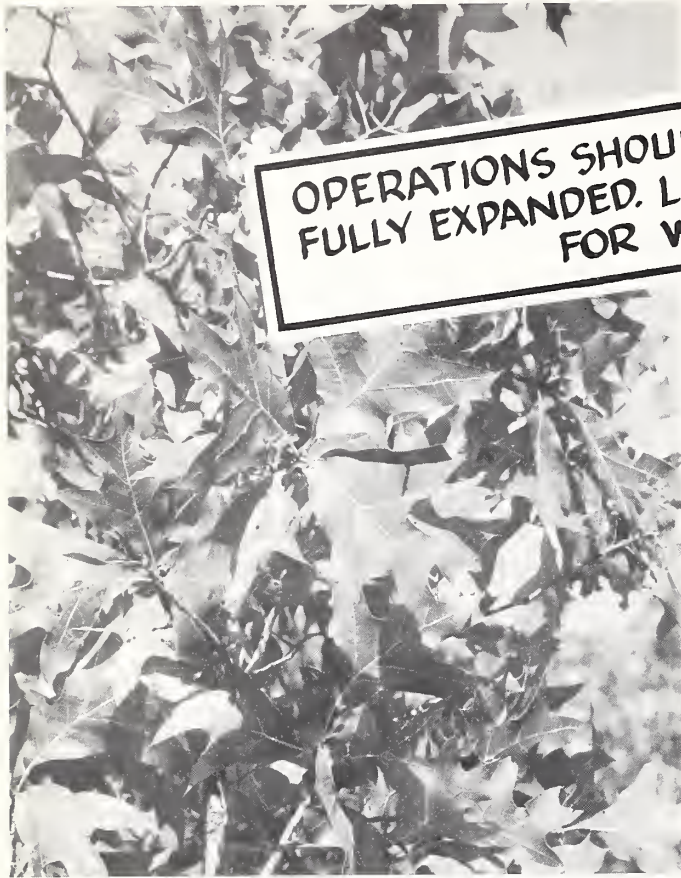
- 1. BURN**
- 2. CHOP**
- 3. RECHOP**

Planted pines grew much faster on areas that were cleared with the heavy double-drum chopper--probably because this machine chopped all plant debris into the ground and did not remove topsoil. The very best site treatment consists of burning the ground litter about May 1, allowing 6 to 8 weeks for oaks to sprout and chopping about June 15, then chopping once more in August or September.

Heavy machinery is essential. Ordinary farm equipment is much too light to destroy scrub oaks.

**CONSULT YOUR LOCAL FORESTER BEFORE BURNING**

# WHEN TO CLEAR LAND



OPERATIONS SHOULD START AFTER LEAVES ARE FULLY EXPANDED. LATE APRIL OR EARLY MAY FOR WEST FLORIDA.

Resprouting vigor is low at this time because the food reserves, which are stored in the roots, are scarce.

**IMPORTANT: TWO CHOPPING OPERATIONS ARE ESSENTIAL**

**6 TO 8 WEEKS SHOULD LAPSE BETWEEN OPERATIONS**

Oak stumps and root collars should be allowed to resprout and use reserved foods between clearing operations. This saps their vigor and makes them easy to kill with the second chopping.

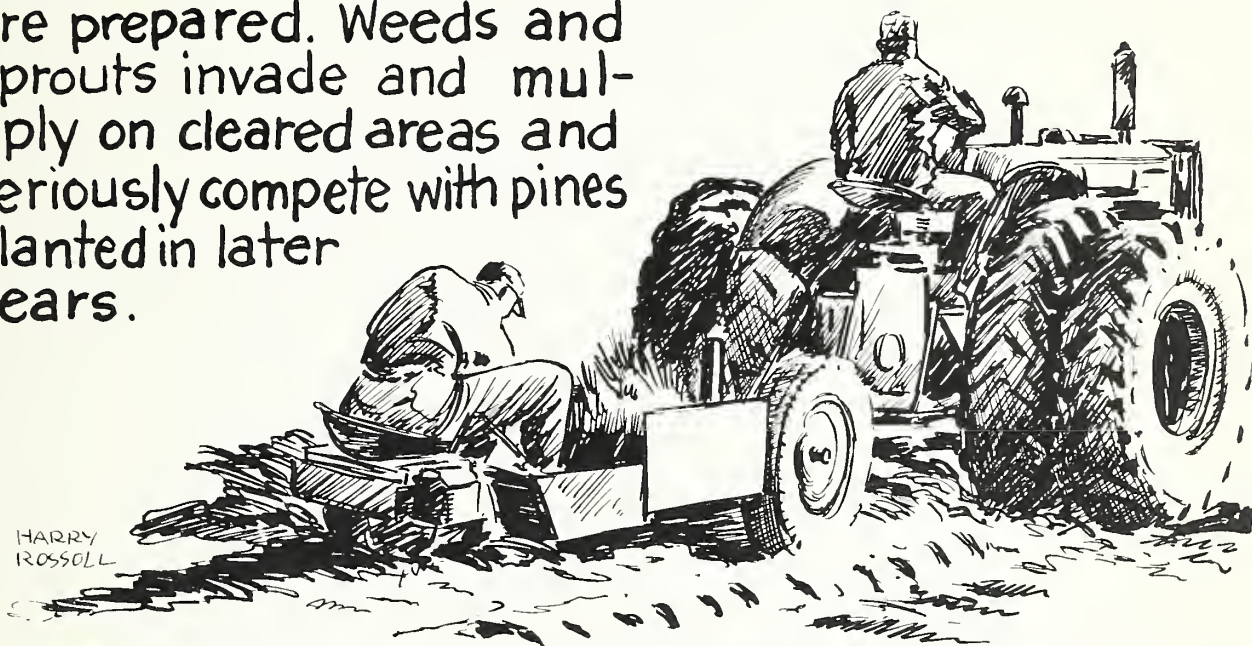




# WHEN TO PLANT

Pines should be planted the first winter after sites are prepared. Weeds and sprouts invade and multiply on cleared areas and seriously compete with pines planted in later years.

## Don't delay!



# WHAT TO PLANT

MACHINE PLANTING IS CHEAPEST



Slash pine has produced the best all-round survival and growth in sandhills planting tests. No other species can be recommended wholeheartedly at this time. Sand pine, longleaf, and loblolly are showing promise, though, and positive advice for planting these species on cleared sandhills should be available in a few years.

COMPLETE ALL OPERATIONS IN A SINGLE YEAR

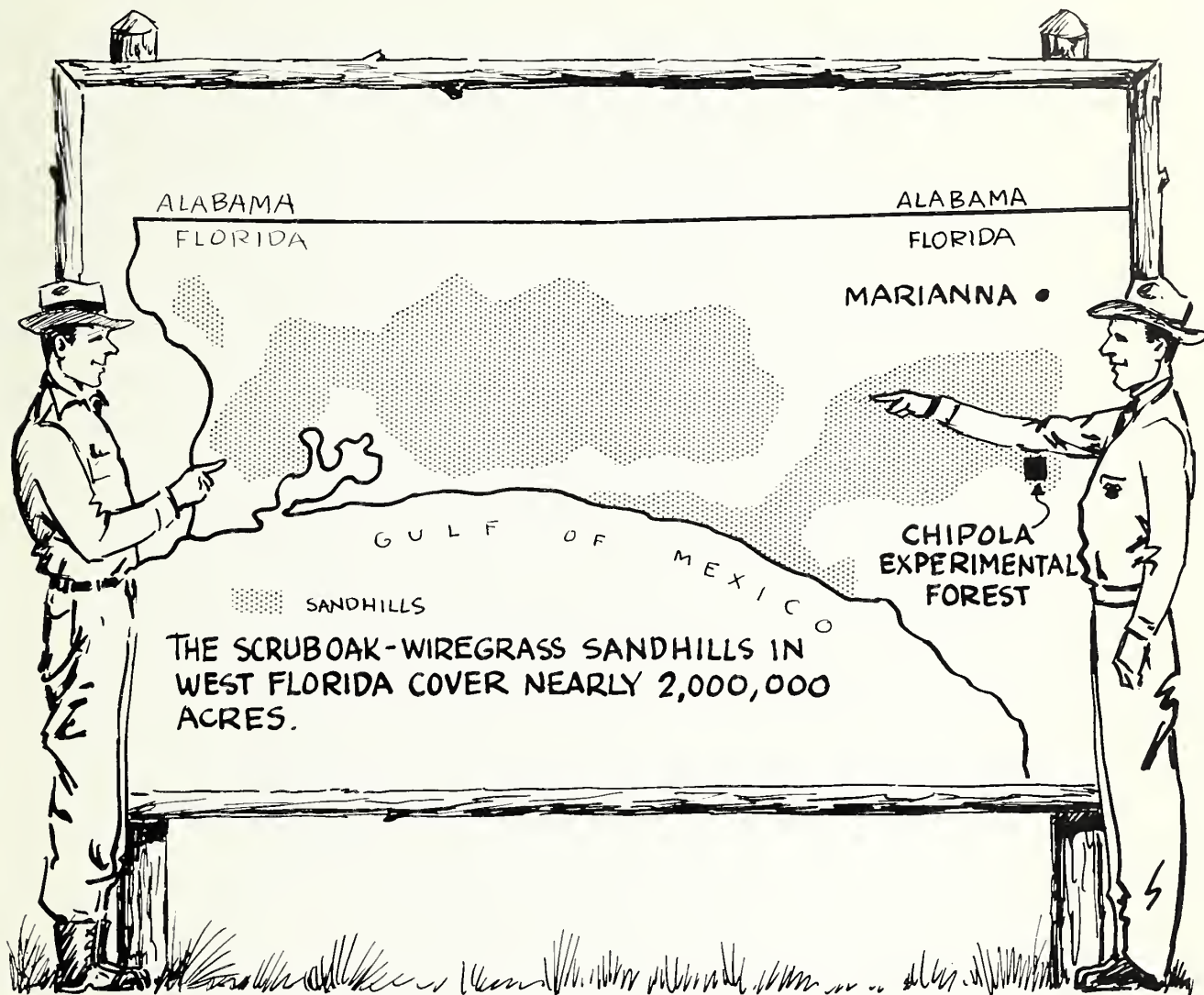




Slash pine, age 13, on sandhills site



YOU ARE INVITED TO VISIT THE CHIPOLA EXPERIMENTAL FOREST, WHERE FOREST SCIENTISTS CONDUCTED MUCH OF THE RESEARCH THAT LED TO THIS REPORT. THE FOREST IS 36 MILES SOUTH OF MARIANNA, FLORIDA



RESEARCH ON WEST FLORIDA'S SANDHILL PROBLEMS IS MADE POSSIBLE BY COOPERATION. SPECIAL THANKS ARE DUE:

The Florida Board of Forestry - Hardaway Contracting Co. - International Paper Co. - St. Joe Paper Co. - University of Florida Agricultural Experiment Station, and many other State and industrial organizations



*Remember — only you can*  
**PREVENT FOREST FIRES!**

SOUTHERN  
FOREST  
EXPERIMENT  
STATION



*IN COOPERATION WITH*



FLORIDA  
BOARD  
OF  
FORESTRY